

Amendments to the Specification:

Please amend the Abstract of the application at page 28 of the application to read as follows:

~~An interface circuit permits communication between devices of dissimilar logic families without requiring level translation, by interposing a switching transistor between the devices. In one embodiment, a~~ A switching transistor is placed between a serial port of a RS232 device and a parallel port of a TTL microcontroller. Selective activation of the switching transistor permits a high voltage signal to be transmitted from the power supply rail of the TTL microcontroller to the RXD pin of the RS232 device, where the signal is interpreted as a logical low. This step takes advantage of the fact that the RS232 standard interprets any voltage received at the RXD pin greater than a receiver threshold value to be a logical low. Selective deactivation of the switching transistor isolates the RS232 port from the non-RS232 device, permitting negative voltage signal output by the TXD pin of the idling RS232 port to be conveyed back to the RS232 port at the RXD pin. This negative voltage signal is interpreted by the RS232 port as a logical high signal. ~~This step takes advantage of the fact that the RS232 standard calls for the TXD pin to emit a default 12V signal when the RS232 port is otherwise idle.~~

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)

7. (Currently Amended) A method of communicating between a first device utilizing a first logic family and a second device utilizing a second logic family different from the first logic family, the method comprising the steps of:
 - forming an electrical connection between a first node of a switch and a transmit data terminal of the first device;
 - forming an electrical connection between the first ~~switch~~ node and a transmit data terminal of the second device;
 - forming an electrical connection between the first ~~switch~~ node and a receive data terminal of the second device;
 - forming an electrical connection between a second node of the switch and a power supply of the first device;
 - forming an electrical connection between a control node of the switch and a receive data terminal of the first device;
 - transmitting a first power supply voltage from the receive data terminal of the first device to the ~~switch~~ control node, such that the switch is placed into a first state and a second power supply voltage is conveyed from the transmit data terminal of the second device to the transmit data terminal of the first device;
 - transmitting the first power supply voltage from the receive data terminal of the first device to the ~~switch~~ control node, such that the switch is placed into the first state and a third power supply voltage is conveyed from the transmit data terminal of the second device to the receive data terminal of the second device; and

transmitting a fourth power supply voltage from the receive data ~~pin~~ terminal of the first device to the ~~switch~~ control node, such that the switch is placed into a second state and the first power supply voltage is conveyed from the first device to the receive data ~~pin~~ terminal of the second device, the second device interpreting the received first power supply voltage traversing a receiver threshold value as a first logic state.

8. (Currently Amended) The method according to claim 7 wherein:

the step of forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of the second device comprises forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of an RS232 device;

the step of forming an electrical connection between the first ~~switch~~ node and a receive data ~~pin~~ terminal comprises forming an electrical connection between the first ~~switch~~ node and a receive data ~~pin~~ terminal of the RS232 device;

the step of transmitting a first power supply voltage from the receive data ~~pin~~ terminal of the first device to the ~~switch~~ control node causes an RS232 power supply voltage of approximately -12V to be conveyed from the RS232 transmit data ~~pin~~ terminal to the RS232 receive data ~~pin~~ terminal; and

the step of transmitting a fourth power supply voltage from the receive data ~~pin~~ terminal of the first device to the ~~switch~~ control node causes the first power supply voltage traversing a +3V receiver threshold value to be conveyed to the RS232 receive data ~~pin~~ terminal.

9. (Currently Amended) The method according to claim 8 wherein:

the step of forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of the first device comprises forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of a TTL microcontroller;

the step of forming an electrical connection between the second ~~switch~~ node and the power supply comprises forming an electrical connection between the second ~~switch~~ node and a power supply bearing a +5V TTL microcontroller power supply voltage;

the step of forming an electrical connection between the ~~switch~~ control node and a receive data ~~pin~~ terminal of the first device comprises forming an electrical connection

between the ~~switch~~ control node and the receive data ~~pin~~ terminal of the TTL microcontroller;

the step of transmitting a first power supply voltage from the receive data ~~pin~~ terminal of the first device to the ~~switch~~ control node comprises transmitting a +5V TTL microcontroller power supply voltage to the ~~switch~~ control node to cause the +5V TTL microcontroller power supply voltage to be conveyed from the RS232 transmit data ~~pin~~ terminal to the receive data ~~pin~~ terminal of the TTL microcontroller; and

the step of transmitting a fourth power supply voltage from the receive data ~~pin~~ terminal of the first device to the ~~switch~~ control node comprises transmitting a 0V TTL microcontroller power supply voltage to the ~~switch~~ control node to cause the +5V TTL microcontroller power supply voltage traversing the receiver threshold value to be conveyed to the receive data ~~pin~~ terminal of the RS232 device.

10. (Currently Amended) The method according to claim 7 wherein:

the step of forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of the first device comprises forming an electrical connection between a collector of a PNP transistor and the transmit data ~~pin~~ terminal of the first device;

the step of forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of the second device comprises forming an electrical connection between the PNP collector and the transmit data terminal of the second device;

the step of forming an electrical connection between the first ~~switch~~ node and a receive data terminal of the second device comprises forming an electrical connection between the PNP collector and the receive data ~~pin~~ terminal of the second device;

the step of forming an electrical connection between the second switch node and a power supply of the first device comprises forming an electrical connection between an emitter of the PNP transistor and the power supply of the first device; and

the step of forming an electrical connection between a control node of the switch and a receive data ~~pin~~ terminal of the first device comprises forming an electrical connection between a base of the PNP transistor and the receive data ~~pin~~ terminal of the first device.

11. (Currently Amended) The method according to claim 7 wherein:

the step of forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of the first device comprises forming an electrical connection between a drain of a PMOS transistor and the transmit data ~~pin~~ terminal of the first device;

the step of forming an electrical connection between the first ~~switch~~ node and a transmit data ~~pin~~ terminal of the second device comprises forming an electrical connection between the PMOS drain and the transmit data terminal of the second device;

the step of forming an electrical connection between the first ~~switch~~ node and a receive data ~~pin~~ terminal of the second device comprises forming an electrical connection between the PMOS drain and the receive data ~~pin~~ terminal of the second device;

the step of forming an electrical connection between the second ~~switch~~ node and a power supply of the first device comprises forming an electrical connection between a source of the PMOS transistor and the power supply of the first device; and

the step of forming an electrical connection between a control node of the switch and a receive data ~~pin~~ terminal of the first device comprises forming an electrical connection between a gate of the PMOS transistor and the receive data ~~pin~~ terminal of the first device.